

Bay Area Adaptation Assistance for Local Governments

Overview

In the San Francisco Bay Area, unavoidable climate change impacts such as more frequent high heat days and sea level rise will add to and exacerbate the existing host of stressors and management challenges facing our human-built environment and infrastructure, natural systems, and governmental systems. These are the resources and systems that are so critical to our region's economic stability, safety and public health. Exactly at the time that local and regional governments and resource-based managers need to ramp up adaptation planning efforts to help the Bay Area address climate change impacts, they face big hurdles to taking action. They lack funding and staff resources, accessible and relevant scientific and policy information, and, often, political will for these planning efforts. (Moser and Tribbia 2007a) Local government decision-makers and staff have called for a regionally organized and coordinated effort to assist them in overcoming these hurdles.¹

The San Francisco Bay Conservation and Development Commission (BCDC) has taken a lead in developing an Adaptation Assistance Program (AAP) to provide information and resources to San Francisco Bay Area local and regional governments, including land use planning, public works, park and open space and public health departments, flood control districts and wastewater authorities, as well as resource-based managers to assist them in planning for and adapting to the impacts of a changing climate. The AAP will also facilitate inter-organizational coordination and partnerships that support and promote adaptation planning in the Bay Area. Already, BCDC has partnered with the Association of Bay Area Governments (ABAG) and multiple NOAA programs on adaptation planning education and outreach projects.

The AAP is supported by the Joint Policy Committee (JPC) of the San Francisco Bay Area through the JPC's Regional Agency Climate Protection Program which coordinates and builds upon individual efforts of four regional agencies: BCDC, ABAG, Bay Area Air Quality Management District (BAAQMD) and the Metropolitan Transportation Commission (MTC). As the AAP expands and evolves, BCDC and ABAG will share program management responsibilities, and the Bay Area Air Quality Management District (Air District) will likely take on a more active coordination role in the program.

Adaptation Assistance Program Goal and Objectives

The long-term goal of the AAP is to help San Francisco Bay Area communities succeed in achieving coordinated and region-wide adaptation to climate change impacts. The AAP contributes to this goal is by building capacity within local governments to assess climate change issues, and plan for and implement adaptation strategies. BCDC identified the following objectives for achieving this program goal:

- Provide and facilitate access to information, tools, guidance and training for adaptation planning that are (1) relevant to local and regional governments' and resource-based managers' needs; (2) easily accessible to, and in formats easily utilized by, planners and managers; and (3) derived from current and reliable sources.

¹ Information gathered by BCDC through interviews with local and regional agencies and organizations in Spring of 2007, and through feedback from participants in the "Preparing for Sea Level Rise in the Bay Area – A Local Government Forum" held by BCDC on April 16, 2008.

- Help local and regional governments and resource-based managers integrate and coordinate climate change adaptation planning with ongoing planning and management for the region, and with their greenhouse gas mitigation efforts.
- Help local governments and resource-based managers find and secure resources (e.g. funding, staff time, expert consultation time, data, etc.) needed to conduct adaptation planning and to implement strategies and ongoing monitoring.
- Facilitate coordination among planners and managers of neighboring and overlapping jurisdictions to help achieve consistent adaptation planning.
- Provide guidance for local and regional agencies and organizations on how to: (a) achieve consistency with federal, state and regional adaptation policy; and (b) take advantage of federal, state and regional resources available for adaptation planning and implementation.

Program Components

BCDC has identified five broad program components for accomplishing the AAP objectives described above. Work on some of these components, such as partnership building and educational workshops for local governments, has already begun, and others will take longer to develop and implement.

Partnerships and Coordination

Climate change impacts will cut across jurisdictional boundaries, both geographic and sectoral (e.g. public health, land use planning, habitat protection, transportation, etc.). Furthermore, as planners and managers make adaptation choices and implement specific adaptation actions, these are likely to have ancillary effects and management implications for other Bay Area locations and resources. These characteristics of climate change impacts and responses require comprehensive and coordinated efforts to successfully build resilience and adaptive capacity in our Bay Area communities.

In developing the AAP, BCDC has been forming new and building upon existing partnerships that are important for the region's adaptation efforts. Some of the partnerships, such as those among the JPC agencies, will form the core of the ongoing assistance program. Other partnerships are and will be formed around specific projects or issues.

Website and Information Clearinghouse

An important component of the AAP will be the development and long-term management of a website that serves a variety of needs for adaptation planning and implementation in the Bay Area. Adaptation planning requires compilation and analysis of large quantities data and information from diverse sources. Lack of sufficient information about climate change impacts can be an obstacle to adaptation planning, but often the primary obstacle for planners and managers is that scientific information pertaining climate change has not been "translated into management-relevant variables or metrics." (Moser and Tribbia 2007b) Bay Area agencies and organizations prefer to have access to these data as well as other resources that are relevant to adaptation via a web 'clearinghouse' – a "one stop shop." They also identified a website as an important vehicle for much-needed public outreach and education on adaptation.²

² Information gathered by BCDC through interviews with local and regional agencies and organizations in Spring of 2007, and through feedback from participants in the "Preparing for Sea Level Rise in the Bay Area – A Local Government Forum" held by BCDC on April 16, 2008.

Outreach

Bay Area communities' awareness of the causes and impacts of climate change has increased dramatically in recent years. Partly as a result, efforts to mitigate greenhouse gas emissions have been initiated at multiple governmental levels and through a variety of program approaches. However, efforts to improve the adaptive capacities of our natural and human-built systems to the impacts of climate change have not kept pace with greenhouse gas mitigation efforts. Multiple reasons for this discrepancy exist, such as our scientific uncertainty about the characteristics of projected climate change impacts at regional and local scales. Another possible reason is the perception that our decision to do adaptation planning signifies that we are 'giving up' on fighting future climate change. (Moser and Tribbia 2007a)

Public outreach about adaptation is essential to helping us overcome some of these perceived obstacles to planning for climate change impacts, and for building support in our communities and local and regional institutions for adaptation planning. Representatives of Bay Area local and regional governments and organizations have further specified that to be most effective these public outreach efforts need to present a consistent suite of messages and, ideally, be prepared and promoted through a representative regional organization (such as the JPC). Helping to further develop and promote coordinated public outreach about climate change adaptation in the Bay Area is another component of the AAP.

Training and Education

Outreach to build awareness of the need for improving our communities' resilience and adaptive capacities needs to be followed with education and training to help planners and managers develop the knowledge base and skills for adaptation planning. Through training and education efforts, the AAP can help agencies and organizations: integrate adaptation planning into existing work (where possible); develop the expertise to address new planning challenges due to climate change impacts; and achieve consistent approaches to adaptation planning across different jurisdictions. An early AAP effort has been to offer two workshops (in September 2009) on Planning for Climate Change for Bay Area local-level planners. partners work together to coordinate and support these efforts and provide follow-up training and check-ins with local and regional governments and organizations.

Tools for Adaptation Planning and Implementation

Climate change will exacerbate many of the existing stressors to our human-built and natural systems. In the face of these challenges, some of our existing planning and management approaches will enable us to address certain issues. However, climate change will also introduce new stressors and complexities that we have not experienced or planned for in the past. Planners and managers need tools to address these new and highly complex challenges. A valuable component of the AAP is the development and dissemination of strategies that can be implemented to improve our region's resilience and adaptive capacity. Examples of these tools could include: example adaptation policy language for General Plan updates; regulatory options such as sample zoning ordinances, easements or building standards that address climate change; siting and design guidance for soft shoreline protection mechanisms; and more.

References Cited

Moser, S.C. and Tribbia, J. (2007a). Vulnerability to coastal impacts of climate change: Coastal managers' attitudes, knowledge, perceptions, and actions. California Energy Commission, PIER Energy-Related Environmental Research, Sacramento, CA, CEC-500-2007-082.

Moser, S.C. and Tribbia, J. (2007b). More than information: What California's coastal managers need to plan for climate change. California Energy Commission, PIER Energy-Related Environmental Research and the California Environmental Protection Agency, Sacramento, CA, CEC-500-2007-046.